



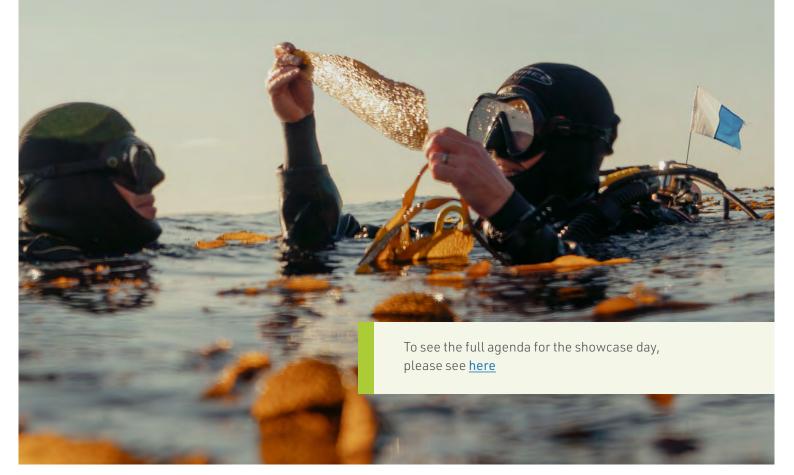






CONTENTS

Opening summary3
About CMS4
CMS core team5
Showcase aims6
Showcase summary
1. Centre for Marine Socioecology overview8
2. A focus on Integrated Ocean Management10
Panellist contributions and reflections14
Participant feedback
What was the most valuable takeaway from the day for you? 31
Showcase Day 2
Looking ahead to 202534
Annex



OPENING SUMMARY

This report outlines a summary of the CMS Annual Showcase Event, which we were pleased to host in nipaluna/Hobart on 28th October 2024. This year's showcase was spread over two days. The first day was an external showcase event that was attended by more than 160 people from over 40 organisations; and included CMS researchers and students, University of Tasmania leaders and affiliates, and representatives from Traditional Owner communities, state and federal government organisations, industry bodies, and NGOs. The second, was an internal CMS Day which brought together CMS students and researchers to reflect on the first day's proceedings, share experiences, and identify pathways for future research, and the future of CMS.

Both days of the showcase focused on 'Building Connections' and we are grateful for the effort of CMS researchers and students, and the interest and time generously given by external participants - in coming together to learn and discuss how we can better connect across sectors and interests, to identify shared pathways and opportunities for collaboration and integration in the marine space here in Tasmania and elsewhere.

The participant summaries that follow provide a snapshot of the breadth of work presented by CMS researchers and marine stakeholders on the day ranging from reflections on running multi-sector partnerships to connecting to Sea Country, and from implementing integrated ocean management in Australia to applying psychological principles to support marine science and stewardship. These examples highlight some of the many diverse voices of the marine space, all offering meaning and context to the complexity of achieving integration in practice.

The post-showcase survey we conducted revealed that participants were grateful for this opportunity to connect in-person with folks from different sectors, and to learn more about the work and impact CMS is achieving. In particular, participants highlighted their learnings from the 'Fireside Yarn' session, presented by Dean Greeno and Beth Fulton, and expressed their eagerness to continue to learn about and connect with Sea Country.

This report seeks to convey the work and discussions presented at the showcase, to continue building momentum on connecting disparate groups and sectors, and to emphasise shared interests and values in the marine space – the gateways and opportunities for collaboration.

We wholeheartedly thank the many people - our researchers, students, collaborators, stakeholders, and new friends – who participated and contributed to make the CMS Showcase an opportunity for learning and sharing. We look forward to continuing these important conversations with you into 2025 and beyond - as we work together to help support responsible stewardship and sustainable use of our unique marine systems, to ensure they can be appreciated by many generations to come.

Professor Gretta Pecl

Crettaledo

Director

Dr Beth Fulton **Deputy Director**

Dr Rachel Kelly Knowledge Broker

fochel Le

ABOUT CMS

The Centre for Marine Socioecology (CMS) was established to address research questions and stakeholder needs regarding current and future uses of the ocean and coasts, using a coordinated interdisciplinary and transdisciplinary approach. CMS brings together a diversity of disciplinary expertise from across UTAS and CSIRO, and from many other research and institutional collaborators, through active collaboration that works to directly address the theoretical and applied aspects of marine socioecological systems.

CMS aims to be a world-leading inter/ transdisciplinary research centre, by developing and (co-) delivering work and research that supports informed and sustainable management of ocean and coastal systems. CMS also seeks to address the need to grow a pool of talented and capable inter/transdisciplinary researchers, by providing training and support for the emerging generation of researchers and practitioners.

CMS is globally recognised for its innovative approaches to marine inter/transdisciplinary research, applied research focus, and outputs developed in collaboration with diverse stakeholder groups and across knowledge systems. We foster and facilitate collaborative research activities to address critical inter/transdisciplinary challenges and issues in the marine space.

Our work is actively working towards solutions across five key themes:



Coastal & Marine Governance



Sustainable Futures & Planetary Health



Environmental Change & Adaptation



Knowledge Production



Science Engagement & Impact

CHALLENGES

RESEARCH APPROACH

VISION A WORLD-LEADING CENTRE TO SUPPORT INFORMED AND SUSTAINABLE MANAGEMENT OF MULTIPLE-USES IN MARINE AND COASTAL SYSTEMS. MISSION TO PROVIDE EXCELLENCE IN RESEARCH AND RESEARCH TRAINING THAT UNDERPINS THE SUSTAINABLE USE OF THE MARINE DOMAIN FOR ALL USERS AND BUILDS THE NECESSARY CAPACITY TO PROVIDE SKILLS AND SOLUTIONS FOR INDUSTRY, GOVERNMENT AND THE COMMUNITY.





CMS CORE TEAM



Prof Gretta Pecl CMS Director gretta.pecl@utas.edu.au



Dr Beth Fulton CMS Deputy Director beth.fulton@csiro.au



Dr Rachel Kelly Knowledge Broker r.kelly@utas.edu.au



Dr Hannah Fogarty Executive Support Officer cms.admin@utas.edu.au

SHOWCASE AIMS

Marine and coastal systems are changing rapidly, in ways that impact all sectors.

Sharing and (co-)developing knowledge across sectors can help us understand and navigate the changes ahead, even under uncertainty. In Tasmania and Australia, however, marine management and governance approaches have traditionally been sector-based and ill-equipped to adapt to such change.

Integrated management approaches have been presented as an alternative, linking planning, decision-making, and management arrangements across sectors in a unified way. But achieving integration in practice has proved challenging and to date, limited examples of success in the marine space are evident.

With a focus on bringing together different perspectives and knowledge from across sectors to consider integration and collaboration, this year's CMS Showcase convened more than 160 people from over 40 organisations representing research, government, industry, NGOs, the community, as well as Indigenous voices.

Our goal was to facilitate reflective discussion on how to achieve knowledge sharing, collaboration, and real integration across sectors in practice.



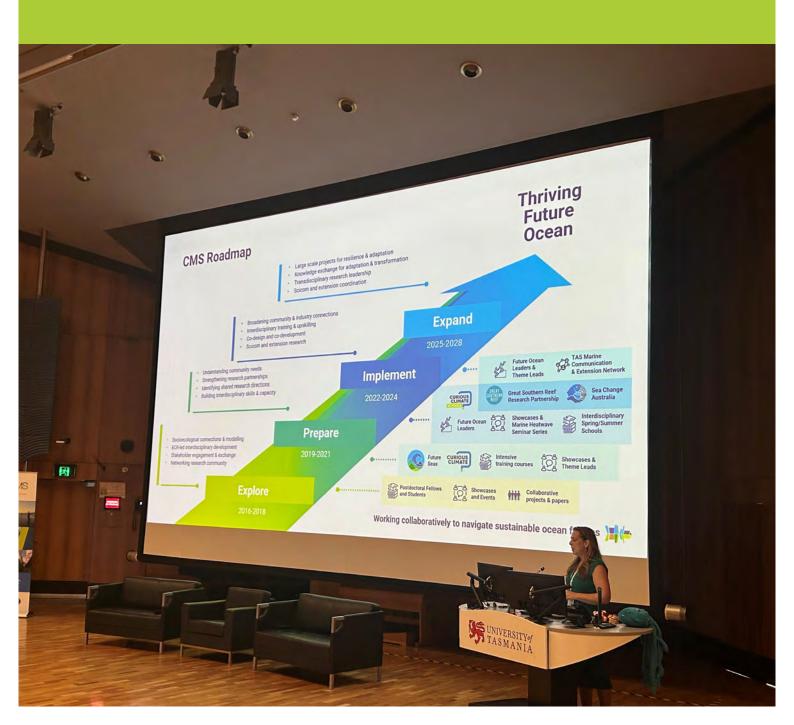


We asked...

What is integration? How can we bring together diverse sector interests and perspectives in truly collaborative approaches to management?



SHOWCASE SUMMARY



1

Centre for Marine Socioecology overview



Dr Rowan Trebilco
with support from Connie
Cirkony, Maree Fudge, Beth
Fulton, Phillipa McCormack,
and Roshni Subramaniam.

The Centre for Marine Socioecology Showcase, brought together people from research, government, industry, NGOs, the community, as well as Indigenous voices, to reflect on the Centre's achievements in interdisciplinary marine research and to chart future directions for sustainable ocean management.

The day began with a powerful Acknowledgement of Country, setting the tone for a showcase that would emphasize the importance of diverse perspectives and knowledge systems. CMS member Dean Greeno, an Indigenous artist and researcher, shared stories that highlighted the deep connection between culture and country, reminding attendees of the long history of human interaction with the sea. This was followed by an opening address from inaugural CMS director, Stewart Frusher, which emphasized the need to move beyond conventional sustainability approaches. Stewart highlighted the importance of addressing interacting problems in the marine space through multidisciplinary and multi-sector collaboration, particularly in the context of growing pressures on marine ecosystems and the expansion of the Blue Economy.

The opening session of the showcase – "Collaboration, integration... what do we mean?" – was delivered by Joanna Vince and Liam

Fullbrook. Together, they framed the focus of the day: understanding different perspectives on integration and identifying ways and examples to achieve collaboration in practice. Throughout the sessions that followed, integration continued as the central theme. Speakers from various backgrounds stressed the need for holistic approaches to marine management, acknowledging the challenges of aligning diverse interests across sectors including commercial fishing, conservation, and emerging industries like offshore energy. The development of Australia's Sustainable Ocean Plan was also a focal point of discussion, with participants exploring how to translate high-level commitments into actionable policies.

A panel discussion on "Diverse interests but a shared agenda" featured representatives from research, government, and industry sectors. Panellists addressed the complexities of achieving





integration in practice, highlighting the importance of early stakeholder engagement, transparent decision-making processes, and the need for policy frameworks that can accommodate diverse perspectives and knowledge systems.

The showcase then shifted to highlight "CMS research in action", with a series of rapid-fire presentations that showcased the breadth and depth of the Centre's work. From innovative approaches to stakeholder conflict resolution, to the application of conservation psychology in marine settings, the work presented painted a picture of marine socioecology at the cutting edge of interdisciplinary research.

The afternoon sessions delved deeper into the practicalities of achieving integration. Speakers emphasised the crucial role of knowledge brokers in translating between disciplines and stakeholders, and the importance of co-design

processes in ensuring research relevance and impact. The potential of the Nature Repair Market for marine ecosystems was also explored.

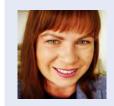
The panel session "Achieving integration:
Lessons and opportunities" brought together
perspectives from policy, research, and industry.
Key points raised by panellists included the need
for policy certainty to support long-term planning
and investment, the importance of aligning
local and regional initiatives with international
agreements, and again, the potential role of
knowledge brokering in facilitating more effective
collaboration across sectors.

The final session engaged audience participants in a forward-looking discussion on the future of marine socioecology more broadly, including what role CMS work and research has to play. The needs and ideas that emerged from this discussion ranged from securing sustainable funding models to developing regional pilot projects demonstrating integrated ocean management. The importance of building ocean literacy within communities, and fostering stronger connections between research, policy, and practice were also emphasised.

The 2024 CMS Showcase not only celebrated another year of collaborative interdisciplinary marine research, it also laid the groundwork for future collaborations and innovations in sustainable ocean management. While acknowledging the complexities and challenges ahead, participants expressed a shared commitment to fostering interdisciplinary approaches, building diverse partnerships, and translating knowledge into actionable solutions for the benefit of both marine ecosystems and coastal communities.



A focus on Integrated Ocean Management



Dr Joanna Vince UTAS, CMS

Current siloed, sector-based management approaches, policies and institutional arrangements are failing to address crisis level issues including climate change, ocean acidification, marine pollution, and changes to species distribution, productivity and abundance.

Over the last six decades there have been calls for 'integration' in marine governance through global instruments such as the WCED's Brundtland Report Our Common Future (1990); UN Conference on the Environment and Development's (UNCED) Agenda 21 (1992); World Summit on Sustainable Development (WSSD) (2002); and Rio+20 (2012). In 2017, the UN called for 'an integrated, interdisciplinary and cross-sectoral approach as well as enhanced cooperation, coordination, and policy coherence, at all levels' in oceans governance (Res 71/312 of 6 July 2017).

More recently, the High Level Panel for a Sustainable Oceans Economy encouraged member states, including Australia, to develop Sustainable Ocean Plans that 'should be in line with the 2030 Agenda for Sustainable Development, build on integrated ocean management and ecosystem knowledge, address pressures from all land and sea-based sources, and take account of the predicted impacts of climate change. As the foundation for a sustainable ocean economy, these plans should be developed and implemented



Dr Liam Fullbook UTAS, CMS

through an inclusive, participatory, transparent and accountable process'.

Nation states have heeded this call. However, they have had difficulties with implementing integrated policy approaches due to the sectoral nature of the management arrangement of their marine resources. Sectoral approaches are based on vertical rather than horizontal decision making; this encourages competition and conflict rather than cooperation between those involved.

In contrast, integration across sectors and jurisdictions facilitates more holistic management in the marine space occurring both vertically (between jurisdictions) and horizontally (across sectors). Integrated policy approaches have been found to overcome policy overlaps, conflict, inefficiencies and inconsistencies. They have been presented and adopted in oceans governance in efforts to improve marine ecosystem health and the way ocean resources are managed.

Despite these hopes and intentions, however, there is ambiguity in understanding exactly what the concept of integration actually means. Integration can be referred to as a 'whole of government' or 'joined up government' approach to policy implementation. Integration is also related to, and sometimes used interchangeably with other concepts that include coordination,

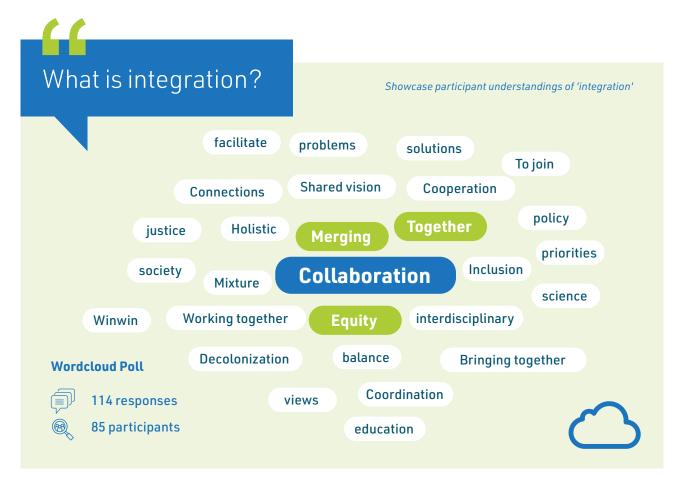
cooperation, coherence, collaboration – all of which have different definitions but are related. In ocean governance, integration is referred to as integrated oceans management, integrated marine management, integrated management, and/or ecosystem-based management.

The concept of 'integration' is defined and understood differently across disciplines, situations, and stakeholders. Arild Underdal raised questions about "What exactly 'integrated' or 'coherent' policy means" in his seminal work in 1980. These questions are still being researched in the public policy and ocean governance disciplinary spaces. Underdal indicated that integration meant adopting a long-range view, having a clear 'overall' policy goal, and achieving consistency across the policy process - which remains difficult for governments, policymakers, and political decision-makers to achieve today.

Further, there is confusion about who is involved in integration in government. Should it be decision makers, policymakers, managers, politicians, or street-level bureaucrats? Who should be involved outside of government? Stakeholders, industry, community groups, Indigenous voices, or all of these?

Certainly, the conceptualisation of integration is broad and terminology differs. But does this matter?

While definitions and different disciplinary perspectives can provide understanding on how to achieve a goal of integration, the reality of the challenges and impacts of integration go beyond concepts and definitions to achieve purposeful action and effective implementation in practice: and in practice there is movement forward. For the first time in over 20 years in Australia, oceans are back on the national agenda! This year, Australia released a Draft Sustainable Oceans Plan which was developed in collaboration with 23 different government agencies as well as key ocean, marine, and coastal stakeholders. The Draft plan takes a holistic approach to ocean governance and emphasizes "collaboration" as a main focus. It recognises the need for numerous stakeholders to be involved in implementation, including Aboriginal





Australians, community groups, and industry. This Draft plan is not only an opportunity to start anew, but perhaps more importantly a continuation of the policy achievements of the past. Its new, ambitious approach to oceans governance will no doubt be challenging to implement, however, the willingness and support of 'integration' at a national level is welcomed by all who care and are committed to achieving ocean sustainability.

In CMS, our researchers have explored integrated marine/ocean management, ecosystem-based management, marine spatial planning and other related aspects of integration for decades. Through this work, our researchers have identified integrated ocean management as necessary to improving ocean governance and as an essential feature of sustainable development. Integrated management offers a holistic, ecosystem and knowledgebased approach that can ensure the sustainability and resilience of marine ecosystems, while also taking into account the perspectives of multiple stakeholders and diverse ocean uses. Ecosystembased management and marine spatial planning are essential aspects/tools of these efforts.

New policy design supported by the policy process, political will, and a restructure of institutional arrangements is needed to fully enable, support, and strengthen IOM. A central barrier to this in practice however, is the inflexibility of current institutional arrangements which continue to support siloed decision-making, and is a key focus for some CMS researchers in their current work.

This year's showcase focused on integrated management to shine a light on examples of this CMS work and collaboration.

Through interdisciplinary research and stakeholder collaboration, CMS research has contributed to developing advanced frameworks and tools for addressing the complexities of integrated oceans management (IOM). This work has highlighted the challenges and opportunities of implementing IOM, and largely focused on policy integration, capacity-building, and governance models. These studies provide practical insights for Australia's marine management landscape, emphasizing themes such as bridging sectoral divides, fostering stakeholder collaboration, and utilizing integrative

capacity to address persistent challenges. For instance, Haas et al. (2021), as part of the CMS Future Seas collaboration, explored governance futures, contrasting a business-as-usual trajectory with a sustainable future, underscoring increased integration as key to achieving the latter. Similarly, Stephenson et al. (2019) proposed a framework for implementing and evaluating integrated marine activity management, a seminal contribution in the field of IOM. This collaboration, featuring a large team of CMS members, was further developed in Stephenson et al. (2023). From a more theoretical perspective, Vince et al. (2024) introduced an integrative capacity framework for policy analysis. As part of an ARC project led by

CMS governance theme leaders, this paper offers a comprehensive approach to enhance capacity for integration. Current governance theme lead Liam Fulbrook's 2024 doctoral research investigated persistent challenges in IOM, building on earlier efforts by Stephenson et al. (2019) and extensive contributions in the field from Marcus Haward and Joanna Vince. This research explores how integration can be operationalised, transitioning from public policy frameworks to practical implementation and management.



MARINESOCIOECOLOGY.ORG

PANELLIST CONTRIBUTIONS AND REFLECTIONS

Panel 1: Diverse interests but a shared agenda



Prof Catriona Madeod





Julian Harrington (Seafood Industry Tasmania)











Diverse interests - but a shared agenda?

The speakers in this multi-sector panel outlined their perspectives from research, policy, industry, and NGOs. Together, they reflected on their experiences of cross-sector partnerships and collaborative initiatives and shared insights and lessons hat can inform the development of integrated ocean management.



Akira Weller-Wong
DEP

Reflections from an environmental partnership program

The Derwent Estuary Program (DEP) is a notfor-profit partnership between state and local government, industry and research partners. The DEP uses science to inform enabled decision making and aspires to be the voice of the Derwent, working to inform and engage the community. Reflecting on the 25 year partnership, we attribute the organisations success and longevity to a shared commitment to conserving and protecting the values of timtumili minanya/Derwent Estuary. An example from the Beach Watch program was provided to demonstrate how longterm monitoring, community engagement and management actions (e.g. infrastructure upgrades) can lead to the enhancement of recreational and environmental values.



Prof Catriona Macleod CMS, IMAS

Research perspectives on the Blue Economy

The planet, especially our coastal and ocean ecosystems, faces many challenges, which can at times seem overwhelming. However, these challenges also offer a unique chance to engage in critical science and make a meaningful impact on the environment and society. Coasts and oceans can play a key role in addressing critical issues like food security, energy supply, and climate change. Effective ocean and coastal management must be part of a broader, holistic sustainability approach to tackle these global challenges.

As we increasingly rely on coasts and oceans for resources, it's essential to recognize the complexity and limitations of these ecosystems but also to focus on efficiencies in resource usage and reducing waste. I'm optimistic and energized by the growing emphasis on collaborative, cross-disciplinary research. Solving these problems requires not just science but collaboration across governments, communities, and other sectors.

Over the years, I've worked on a range of marine management issues—local and international aquaculture, fisheries, renewable energy, mining, and conservation. Successful strategies always integrate ecological, economic, and social factors. With rising pressures on sustainable development in the Blue Economy and the impacts of climate change on natural processes and food systems, diverse research approaches are more crucial than ever. It's also vital to identify and involve the "real" decision-makers in discussions about marine and coastal sustainability.

Fortunately, many key R&D funding organizations are addressing these issues. For example, the FRDC has expanded its focus to include broader

stakeholder equity, community expectations, First Nations engagement, and sustainability in best practice management. The Blue Economy CRC emphasizes renewable energy and sustainable offshore development, while the Marine Bioproducts CRC prioritizes circular economy principles and sustainable governance.

Tackling climate change, however, requires innovative solutions that balance development and conservation. These innovations may involve higher risks, requiring strategies to manage potential challenges and unexpected outcomes. Broader political understanding and support are crucial to enabling this progress.

See Blue Economy CRC



Eloise Carr Australian Institute, Tasmanian Director

Policy perspectives: It's TiME

The Australia Institute's goal is to provide intellectual and policy leadership. We conduct research that drives the public debate and secures policy outcomes that make Australia better. In Tasmania we work across democracy and accountability, climate, environment and economic policy areas. The Australia Institute research has found 76% of Tasmanians are concerned about the health of their coasts and want more government action to protect it.

Tasmania's first State of Environment Report in 15 years confirms coastal waters are in trouble. Reductions in Greenhouse gas emissions are falling well short of what is needed for healthy marine life. Six of 12 indicators are getting worse, including sea surface temperature, kelp, threatened marine fish, beach change, salt marshes, and migratory shore birds. The number of depleting or depleted fish stocks is now 11. Only 1.6 % of state waters are protected in no-take reserves, less than 3% are

in conservation areas that basically exist on paper only. The report also reveals serious deficiencies in the availability of environmental data. It was unable to assess river and wetland water quality due to a lack of data. Coastal water quality was inexplicably not considered, despite wastewater treatment, industrial discharges and organic loads from finfish aquaculture being identified as key pressures on Tasmanian estuaries and enclosed coastal waters in the most recent equivalent national report.

The Australia Institute is proposing new, umbrella legislation to link and coordinate existing sectorbased management. A Tasmanian Integrated Marine Estate Act should be introduced alongside a fisheries management Act, replacing the outdated Living Marine Resource Management Act 1995, currently under protracted review for the first time. Tasmania's next principle marine law should require integrated management, now widely recognised as the only way we can achieve a healthy ocean for future generations. Our main recommendation is the establishment of a Marine Estate Authority, responsible for preparing and implementing a Marine Estate Strategy, including a marine spatial planning framework. Ultimately this would produce marine plans for Tasmania, similar to the planning system on land.



Julian HarringtonSeafood Industry Council,
Chief Executive

Representing the seafood sector

Over recent years, the Tasmanian seafood industry has faced a growing diversity of existing and new stakeholder interests in the marine environment. From the ongoing oil and gas interests in seismic and exploratory drilling, to blue economy opportunities, such as offshore renewable energy, the list goes on and on.

All stakeholders have a shared agenda, striving to provide economic opportunity, jobs, prosperity, whilst also striving towards a healthy, sustainable marine environment, free of pollution, full of diverse marine life etc.

But seafood is different. We also provide food. A superfood in so many ways, from its protein and nutrient supply through, to its environmental sustainability credentials, relative to other protein production (Ray Hilbourn research).

But commercial fishing is still a dirty word.

And managing commercial seafood amongst the diversity of other marine interests is hard.

Closer to home, there is no clear or consistent shared agenda between management and industry. We have archaic rules and regulations, causing complexity, red tape and confusion – but there is no money or resources to tackle the problem properly – so we are stuck with what we have (at least for now)!

In recent years, we have increasingly seen politics and perceptions override robust science. For example, despite commercial sand flathead catches being insignificant, the government banned the take of sand flathead because of the perceptions of recreational fishers.

Add to these challenges market disruption, cost of fuel, uncertainty in leasing quota, costs of living, it is no wonder that the Seafood Industry Tasmania / Rural Alive and Well mental health and wellbeing program Stay Afloat is under growing demand.

But how do we create a better balance between legislative ideology, which is actually a groundhog day of year to year cycles and processes and the reality of industry business needs and survival?

We must change the system somehow, because it is insane to think we can keep doing the same thing over and over again, and expect a different result!

This will take leadership. Leadership from everyone – government, industry the community. And an appetite to create a formal shared agenda for continued commercial access to seafood in the interests of jobs, economic benefits to Tasmania and widespread community access to seafood.





Dr Scott Ling IMAS

Developing collaborative solutions to a shared environmental problem

The grand challenge of marine ecosystem repair demands novel solutions and diverse collaborations if hopes for restoration are to be realised at ecologically meaningful scales. Giant kelp forests are a flagship reef habitat globally, and wholesale collapse in Australia led to the listing of this ecological community as threatened in 2012 (EPBC). In 2024, under a Saving Native Species -Priority Place Grants, The Department of Climate Change, Energy, the Environment, and Water (DCCEEW) have invested in a bold reforestation strategy for giant kelp forests involving a truly holistic transdisciplinary approach led by IMAS scientists to drive practical in-water efforts to restore lost giant kelp forests and augment remnant forest stands within the Tasmanian priority place. The project will deliver critical actions to improve ecological conditions across a total of 20 sites (~10 hectares of reef). Ecological conditions will be improved by combining recent breakthroughs in kelp re-seeding and understanding of ecological conditions favouring giant kelp. Local success in restoration will be scaled-up by targeted harvests to control grazing sea urchins, including rebuilding local populations of urchin-eating lobsters. Capacity building in restoration and monitoring will be aided through partnership with traditional owner groups and recreational dive voluntourism, to ensure improved ecological conditions for remnant and restored forests are sustained into the future.



Dean Greeno UTAS, CMS, Riawunna



Dr Beth FultonUTAS, CMS

First Nations communities in Australia and in around the world have a long relationship with the coasts and oceans. In Australia that relationship has stretched for tens of thousands of years, with experiences and observations underlining how land can become sea (and vice versa). Connections to and in Country are deep and cannot be separated and compartmentalised, as is often done in Western Science, regulatory Departments and policies. Moreover, intergenerational connection is recognised with long timeframe thinking in decision making and exposure of all age groups to pertinent discussions. Traditional Knowledge is also a living knowledge changing with the dynamic nature of the socio ecological systems it describes. While there is richness and much that could be learnt in dialogue between knowledge systems, it is fundamental to recognise that it is not a transactional engagement it is about building relationships, trust and reciprocity. It is also about respecting that not every line or every page of our books of knowledge will be or have to be shared.



Anna Copley
DCCEEW

The Sustainable Ocean Plan: a new integrated approach for Australia

The Department of Climate Change, Energy, the Environment, and Water (DCCEEW) is leading the development of Australia's first ever Sustainable Ocean Plan. The Plan will help us determine the future we want for our ocean, set a vision to 2040, highlight key outcomes we want to achieve, and identify opportunities for action to help us tackle key challenges while supporting people's livelihoods and sustainably growing our ocean economy. An update was provided following recent key phases in the Plan's development, including a public comment period on the draft Plan held in August and September 2024, and an Ocean Dialogue held as part of the Global Nature Positive Summit on 10 October 2024. Collaboration is one of eight national priority areas identified in the draft Plan. We have consistently heard that collaboration is integral to a Sustainable Ocean Plan and needs to underpin action across all priorities.



Dr Malcolm Johnson Huon Valley Council, CMS

Everything should be local: Reflections from local government

Local governments are on the front line of many coastal and climate change challenges. As anchor institutions - organisations that are deeply rooted in a community and use their economic power to strengthen and contribute to that community's well-being - local governments can act as catalysts for collaboration while implementing national, state, and regional goals within the local context. Ultimately, it is local knowledge and local connections that drive sustainable solutions at any level of government. So much so, that researchers, planners, and practitioners should adopt a 'think local, act local' approach towards ocean management. This ensures that local governments are brought in at the beginning of projects, alignment between institutions and local governments is supported, and we better empower local governments to act as the first line of defence against increasing coastal and ocean challenges.



Laura Fatovich NRE Tas

Marine engagement with NRE Tas

At AgFest 2024, we had a collaborative presence at the Fishing Hub with the NRE Tas recreational fishing engagement team, our commercial fishery managers, and the Aquaculture Branch; alongside IMAS researchers, Marine Police and the Inland Fisheries Service.

One of our key objectives was to have interactive learning opportunities at each station. At the aquaculture station, we had our remote-operated vehicle (ROV) - used for finfish compliance - in a paddling pool. This experiential learning opportunity led to many interactions with patrons - with a range of ages - who asked curious questions and were able to remember what we told them. Overall, across all the stations, we observed that the experiential learning helped fill the information gap more successfully than printed, static content. This experience provides an opportunity for all of us to reflect on how we share information with our stakeholders.



Dean Greeno UTAS, CMS, Riawunna

Sea Country perspective

Healing country, healing ourselves, we are made of water, minerals and grow and become healthy under sky country, looking after country means we are looking after ourselves.

We are all on canoes that hold our experiences and knowledge and we rise and fall on the same tide. We build and use our canoes in our individual ways to travel down the creeks, to the streams, and into the rivers, as we travel the water grows in strength and volume, resulting in a stronger and more experienced self so that when we reach the ocean we are ready for its challenges.



Larissa TaylorSavoir Consulting

Finance We Need for the Future We Want - Collaboration Opportunities for Blue Sustainable Finance Futures

This presentation was aimed at updating the CMS research community about recent developments in global climate and biodiversity finance and sustainable finance 'architecture' in Australia. Over the coming years these impending changes in the global financial system will have profound implications for any operations in the marine system, in particular fisheries and aquaculture. As such, being aware of these changes is a necessary step in any progress towards ocean sustainability and integration across sectors.

In this talk I gave a very brief overview of the Australian Sustainable Finance Roadmap June 2024 from the Council of Financial Regulators (APRA, ASIC, RBA, Treasury), the <u>Australian Sustainable Finance Taxonomy</u>, mandatory sustainability reporting standards under Corporations Law, Australia's sovereign bond framework, and opportunities to leverage the Sustainable Oceans Plan as a financial engagement pathway towards the Australian insurance, finance sector and policy makers for blue sustainable finance.

Increasingly insurers and investors are looking for climate resilient, nature based solutions for mitigation and adaptation, including ocean environmental ecosystem accounting and blue carbon solutions, <u>Insurance Council of Australia - Valuing Nature for a Resilient Future 2024, National Adaptation Plan, Investor Group on Climate Change - Activating Private Capital for Climate Adaptation 2024 and <u>DCCEEW Coastal Blue Carbon Ecosystems</u>.</u>

SESSION 4 CMS research in action

Insights, tools, and case-studies on understanding and achieving integrated approaches. This session provided a snapshot of the collaborative inter- and transdisciplinary work that is being conducted by CMS researchers in Tasmania and elsewhere.



Dr Cara Stitzlein CSIRO, CMS



A Warm Data Lab is a highly participatory, experiential approach to support relational learning and understanding. This approach brings together individuals who are interested in strengthening and further practicing their collective ability to perceive, discuss, and grapple with complexity. As such, it is suited to convening diverse perspectives who are willing to share their experiences and vulnerabilities so that multiple 'contexts' can be realised when considering the multitude of forces shaping our world.

A pilot Warm Data Lab was sponsored by a CSIRO Horizon 3 science project, involving CSIRO and CMS participants, earlier this year. Participants arrived curious with many reflecting that dedicated time to share and listen is very valuable but rarely available. There was a palpable desire to create dedicated outputs from the day (i.e. conversation curation), which is contrary to the intent of Warm Data. As a result of the pilot, further exploration of where Warm Data can be applied carefully is ongoing



Dr Corrine Condie CSIRO, CMS

Understanding and mitigating conflict: a novel survey approach

Over the last decade marine-based conflict in Australia has increased significantly. A team at CSIRO, which includes CMS affiliates, has developed a set of tools to assist marine-based organisations to identify and navigate low conflict pathways:

- network survey techniques to investigate conflict typology, conflict levels, and stakeholder positioning;
- gap analysis to identify gaps in stakeholder perception, information, governance, and trust; and
- a dynamic model of social attitudes (the PAX model: People's Attitudes eXplained) to test the efficacy of conflict reduction strategies and policies prior to implementation by managers and planners.



Prof Gretta Pecl IMAS, CMS

Sea Change Australia: Co-Developing pathways to mitigate and adapt to a changing climate for fisheries and aquaculture in Australia

Understanding and responding to the impacts of climate change is a specific example of where different viewpoints and perspectives need to be brought together, and where 'integration' in the marine context would ideally occur. Australia's fisheries and aquaculture sectors face increasing challenges as climate impacts ripple across marine ecosystems. The need for tailored, actionable solutions in fisheries and aquaculture is greater than ever. Sea Change Australia, an initiative funded by the Fisheries Research and Development Corporation (FRDC) together with multiple state agencies, is bringing together fishers, aquaculture producers, industry, researchers, and managers to understand how the sector is already adapting to climate change, identify drivers and barriers to further adaptation, and co-develop practical, localised solutions for climate resilience.

While some operators are already making dayto-day changes to cope with climate impacts, these adjustments often occur without access to the best available knowledge or alignment with government plans. This can result in solutions that are not sustainable or effective in the long term. Building on the successful 'Curious Climate' model, Sea Change Australia facilitates a two-way exchange of knowledge between researchers and stakeholders by inviting the sector to ask their most pressing climate questions, and delivering tailored answers from experts through events, forums, and digital platforms. By working collaboratively with stakeholders, Sea Change Australia aims to create a climate-ready seafood sector, boost resilience, and foster stronger connections between researchers, managers, and industry. It is a project designed to inspire action, share success stories,



and build optimism for the future of Australian fisheries and aquaculture. In addition to nation-wide engagement and communication on climate change, the project also involves 12 detailed case studies across Australia that will shape practical recommendations for strengthening the adaptive capacity of both individual operators and the seafood sector as a whole.

The Sea Change Australia project is a good example of a CMS project that involves or draws on the expertise of climate modellers, fisheries scientists, economists, psychologists, policy specialists, behaviour change experts, and other communication researchers, among others. For fish biologists, fisheries scientists, social scientists and other researchers working on climate change, this project offers a dynamic platform to engage with stakeholders, share expertise, and drive meaningful change in the face of a changing climate. If you would like to get involved as an expert or hear more about the project in the future, please let us know.

See <u>Curious Climate</u>

Join the mailing list





Dr Brianna LeBusque UniSA, CMS

Applying Psychological Principles to Marine Science

In recent years, the importance of multidisciplinary research has been increasingly emphasised as a means to address the complex and novel challenges in ocean conservation. Significant progress has been made in integrating diverse perspectives into this field. However, one area that often remains underrepresented is the role of social science, particularly conservation psychology.

Psychology, broadly defined as the study of human behaviour, has various subfields including Conservation Psychology, that emerged in the 1990s and early 2000s. This field draws on various psychological principles to understand and promote sustainable relationships with the natural environment.

Several psychological concepts are highly relevant to marine conservation efforts, including:

- The application of behaviour change theories, such as the Theory of Planned Behavior and Community-Based Social Marketing, to promote large-scale behavioural change campaigns.
- Exploration of individuals' emotional and cognitive connections to the ocean and marine life, including positive associations (e.g., biophilia) and negative responses (e.g., biophobia).
- Examination of risk perception, with a focus on balancing concern and overwhelm when discussing global challenges like climate change and biodiversity loss.
- In-depth analysis of eco-anxiety: understanding its origins, measuring its impact on the public and individuals working in the marine science space, and developing strategies for its management.

- Insights into cognitive biases (cognitive heuristics) that can lead to seemingly irrational behaviours regarding environmental issues.
- Evaluation of the effectiveness of environmental education and ecotourism experiences in fostering sustainable behaviours.

Since the core challenges of ocean sustainability are ultimately human-centered, involving people and behaviours at their foundation, it is essential to incorporate psychological expertise into multidisciplinary research teams. By leveraging insights from conservation psychology, we can better understand the human dimensions of ocean conservation and develop more effective solutions.



Dr Graham Wood UTAS, CM

12 Questions to help facilitate multisector integrated management.

When discussing with stakeholders what each stakeholder means by 'sustainability', understandings will differ. These differences offer opportunities and challenges. Open questions help you and others understand what is meant by 'sustainability', and importantly these questions can be asked about anything at any scale, and more importantly don't assume anything about where the discussion will go. Here are the 12 questions: What is being sustained? Why is it being sustained? How is it being sustained? What is not being sustained? Why is it not being sustained? How is it not being sustained? What ought to be sustained? Why ought it be sustained? How ought it be sustained? What ought not be sustained? Why ought it not be sustained? How ought it not be sustained? (And to avoid ambiguity, this last question is asking: how should it be ensured that this is not sustained?)



Dr Megan SaundersCSIRO, CMS

Understanding the Nature Repair Market

The Nature Repair Act 2023 came into effect on 15 December 2023 establishing a framework for a world-first legislated, national, voluntary biodiversity market. The Nature Repair Market scheme is a government initiative that incentivises actions to restore and protect the environment. It encourages nature positive land management practices that deliver improved biodiversity outcomes. The scheme establishes a marketplace where individuals and organisations can undertake nature repair projects to generate a tradable certificate. The Ecological System (EKS)

for the Nature Repair Market is an approach being developed by CSIRO and the Australian Government Department for Climate Change, Energy, The Environment, and Water (DCCEEW). It is a repository for ecological knowledge, which will be used by market participants (e.g. buyers, sellers, regulators), brings together many types of knowledge, and provides analytical tools to predict and evaluate biodiversity benefits from nature repair. The EKS is being developed for terrestrial ecosystems, but the market will apply to marine and coastal ecosystems as well, which are unique from biophysical, ecological, socioeconomic, governance, and logistical perspectives. Will the current EKS approach work for marine and coastal ecosystems? We developed a set of activities designed to interrogate the different components of the EKS through the lens of marine and coastal ecosystems to evaluate whether they would apply in those systems.



Achieving integration: lessons and opportunities

The final panel session was reflexive and future-oriented. It asked, What are the enablers of integration? Leading marine researchers and practitioners shared their experiences and offered divers perspectives on what integration could look like in practice.



Ange WilliamsonBlue Economy CRC

collation and management platform, an inclusive stakeholder engagement schedule of events and activities and a strong outreach program that will be undertaken by a series of expert commissions and overseen and supported by a strong and inclusive governance framework.

Futures of Seafood

The Futures of Seafood study aims to deliver an industry-informed program of work that will inform efforts to support a secure, resilient, and thriving Australian seafood community. Over 18-months, the study will map, model and describe the spatial, economic and social impacts of the full suite of government policies and targets that impact ocean access on the seafood industry. Specifically, this study seeks to answer:

- What is the future of seafood production and therefore is availability under threat?
- What if we are at tipping point?
- As competition for ocean space intensifies, how can we measure and manage the cumulative impacts of Government's policy decisions on seafood as an existing industry/operator?

This is a time-critical opportunity and a 'once in a decade' co-designed, multi-disciplinary and collaborative study on Australian seafood. The study's collaborative approach is fundamental to ensure it achieves its ambitious suite of outputs while representing the industry members' data, experiences, and insights with respect and integrity. The study is founded on an enduring data



Dr Jess Melbourne-Thomas CSIRO, CMS

Knowledge Brokering: The Musical!

Knowledge brokers play a facilitation role in communicating concepts and synergies across disciplines, across diverse knowledge systems, and across partners and stakeholder groups. "Knowledge Brokering: The Musical!" is a fun and useful analogy (developed by Megan Auld and colleagues) for the different roles that knowledge brokers play in supporting integration:

- Achieving integration in social-ecological systems research requires a great script and set design – knowledge brokering can play a key role in supporting co-design at the outset of a new research initiative or project.
- In the musical equivalent of knowing the audience, cast and crew, knowledge brokers support relationship building and strengthen networks.



- Training and upskilling is also important knowledge brokers can help provide access to formal or informal training both for researchers and for non-researchers who are part of research processes.
- Rehearsing and reviewing is analogous to the role that knowledge brokers can play helping to adapt approaches as new needs emerge.
- Knowledge brokering can also be the equivalent of behind-the scenes assistance – to create the right environment (the sound and lighting) – for effective knowledge sharing.
- And finally (and most importantly) the performance is a team effort. It requires combinations of different skills, competencies and knowledge to meet the needs of those in the room.





Dr Karen Evans CSIRO, CMS

Aligning the local/regional context to international initiatives

It's all connected, dude. The regional and international agreements that are decided on by the world's countries are implemented at the national level, with flow-ons into the state and territory levels. The commitments made under these agreements therefore translate into policies and processes developed by governments. These set the scene for the information that government agencies need to be able to report against these agreements and meet the policies that they implement...which has flow on effects for funding pipelines. In addition, in many cases it is business and industry that are responding to international settings and foresighting how they might need to respond to international commitments. In many cases they are driving the need for policies at the governmental level. Not thinking about the needs of government, business and industry being set under regional and international agreements results in missed opportunities and slow adaptation to new information needs, resulting in poor decision making based on limited information delivery. There is therefore a need to understand what is happening internationally and translate that to national and sub-national priorities to be able to better foresight what information products are needed now and over the horizon, so that decision making is not made through the rear view mirror, but rather looking through the front windscreen.



Dr Aysha Fleming CSIRO, CMS

Co-design is key for integration

As we move towards more interdisciplinary, multidisciplinary and transdisciplinary projects, and work with diverse teams to bring new insights to innovation, how we integrate different perspectives is a key consideration. Considerations of Co-3D (co-design, co-delivery and co-production) can help to make thinking about these aspects more transparent and more successful. Our work exploring cases of co-production in different contexts of marine and terrestrial climate science demonstrated that these concepts are often misunderstood and confused. The Co-3D model helps to support thinking about different types of integration and the different requirements and outcomes which can be achieved.



Prof Tim Moltmann UTAS

Aligning visions and building diverse teams

Drawing on experiences in leading the Integrated Marine Observing System (IMOS) as a large scale, long-term, national collaborative research infrastructure which is part of the Global Ocean Observing System (GOOS), and related research collaborations including the National Environmental Research Program (NESP), four key points about 'Aligning visions and building diverse teams' are discussed. (1) Clarity of purpose, (2) Building on what we have (vs starting something new), (3) Clarity of governance, and (4) Pathways to impact (plural).



Dr Liam FullbrookUTAS/CMS



Assoc Prof Jo Vince
UTAS/CMS

SESSION 2



Dean Greeno Riawunna/UTAS/ CMS

CHAIR



Dr Beth FultonCSIRO/CMS

PANEL 1



Prof Catriona Macleod IMAS/CMS



Eloise Carr The Australia Institute



Julian Harrington Seafood Industry Council



Akira Weller-Wong

Derwent Estuary

Program



Dr Scott Ling IMAS





Prof Nicole Webster IMAS

SESSION 3



Anna Copley
DCCEEW



Dr Malcolm Johnson Huon Valley Council/ CMS



Laura Fatovich NRE Tas



Dean Greeno Riawunna/UTAS/



Larissa Taylor Savoir Consulting



CHAIR

Prof Jan McDonald UTAS/CMS

SESSION 4



Dr Cara StitzleinCSIRO/CMS



Dr Corrine CondieCSIRO/CMS



Prof Gretta Pecl IMAS/CMS



Dr Brianna LeBusque UniSA/CMS



Dr Graham Wood UTAS/CMS



Dr Megan SaundersCSIRO/CMS



CHAIR

Dr Ian DuttonAFMA/CMS

PANEL 2



Ange Williamson BECRC



Dr Jess Melbourne-Thomas CSIRO/CMS



Dr Karen Evans CSIRO/CMS



Dr Aysha Fleming CSIRO/CMS



Prof Tim Moltmann UTAS/IMAS Adjunct



CHAIR

Dr Alistair Hobday CSIRO/CMS

PARTICIPANT FEEDBACK

Fantastic to see so many different people/ backgrounds/perspectives all represented and included in one forum - this is critically important Panel discussion sessions very insightful. Learned a lot from audience participation.

"

All sessions were excellent but I was enthralled by Dean Greeno's firepit yarn. Very powerful.

It was great to hear from such a wide range of voices and to connect with colleagues old and new.

I really valued listening to all the diverse perspectives.

The ability to bring together such a diverse range of disciplines in the same room and foster meaningful conversations between them was, in my opinion, the greatest success.

66

I particularly liked the opportunity to meet attendees during the forum, this gave me a good insight of the different organisations coming together for a common goal

"

I was inspired by the talks and feel like I can apply some broader approaches to my work

Great mix of interesting presentations, discussions, opportunities for engagement/participation



I was particularly interested in learning about the role of "Knowledge broker" which I had never heard about before.

WHAT WAS THE MOST VALUABLE TAKEAWAY FROM THE DAY FOR YOU?

I'm not alone in wanting to work better with others

Many sectors seek similar outcomes but perspectives can be quite diverse.

All of us work in a similar space with similar challenges, we can work together to address our common issues.

Seeing how large CMS is and all the work that's going on behind the scenes to make a change.

I gained new knowledge on a variety of topics and awareness of projects that were happening.



SHOWCASE DAY 2

Day 2 of the Showcase was an informal CMS Day which brought together CMS students and researchers to reflect on the proceedings of Day 1, share experiences, and identify pathways for future research and the future of CMS.

The collective reflection on Day 2 invited CMSers to articulate their opinions and perspectives on the outcomes of Day 1 discussions and potential for integrated ocean management, and to consider where CMS work and research might contribute to facilitating integration in practice. This Day 2 discussion focused on where integrated approaches might be piloted to inform further implementation in Tasmania (e.g. case-studies in the Huon Valley, Bass Strait wind-energy, etc.). CMS-ers reflected on whether top-down or bottom-up approaches might best facilitate integration in practice, and how collaborative efforts might be driven most effectively. The rights of nature, and developing partnerships to engage Indigenous perspectives in these initiatives were also considered.

Day 2 brought more opportunities to learn about CMS work and research, including quick-fire presentations from CMS students and early-career-researchers. Jess Melbourne-Thomas hosted the *Busy Mayors* game, where two teams of CMS-ers competed in a collective decision-making experience under climate change themes. Participants were very engaged and enthusiastic in playing the game, and reflected on how 'play' can facilitate team-thinking and taking collective action.

CMS welcomed Jodie Rottle, from the JMC Academy, Melbourne who facilitated a 'Sensing with Sound' art/science session. Jodie presented on her creative work in presenting science and data through music. She engaged CMS-ers in considering the soundscapes of their work, and then played the musical 'scores' they created through this exercise. CMS-ers were reminded of the role of art in appreciating and communicating our research, and reflected on how art can be a means to experience research differently for various outcomes.

The CMS Early Career Researcher Leads, Emma Church and Scott Spillias, closed the day, hosting a panel and group reflective session on normalising failure. They invited several senior CMS affiliates (Gretta Pecl, Beth Fulton, Dean Greeno, Rowan Trebilco, Kirsty Nash, and Jess Melbourne-Thomas) to share their experiences of failing, dealing with failures, and highlighting their learnings from failure. The vulnerability and openness shared by the panel and the CMS participants enabled fruitful and honest discussion on coping with failure and building resilience in the research sector, and was well received by participants.



CMS-ers playing the Busy Mayors game, hosted by Jess Melbourne-Thomas.



Fails session hosted by Emma Church and Scott Spillias.

LOOKING AHEAD TO 2025

Sea Change Australia: Co-Developing pathways to mitigate and adapt to a changing climate for fisheries and aquaculture in Australia

Join the mailing list





A one-week intensive interdisciplinary training course covering diverse disciplinary perspectives, collaborative approaches to research, inter/transdisciplinary fundamentals, Al skills for research, understanding of equity and justice in ocean sustainability, and more.

For more info visit

Pictured: Interdisciplinary spring school 2023 participants with CMS hosts

CMS Seminar Series

Our monthly seminar series is an opportunity to learn about CMS research underway and connect with CMS researchers. We welcome external presentations too!

For more info and to sign up for the seminar events, contact Scott Spillias















EXECUTIVE TEAM

Gretta Pecl, CMS Director Beth Fulton, CMS Deputy Director Rachel Kelly, CMS Knowledge Broker Hannah Fogarty, CMS Executive Support Officer

STEERING COMMITTEE

Alistair Hobday, CSIRO Beth Fulton, CSIRO Gretta Pecl, CMS & IMAS Ingrid van Putten, CSIRO Jenn Scott, UTAS - School of Psychological Sciences Joanna Vince, UTAS -School of Social Sciences John Adams, NRE Tasmania Jonny Stark, AAD Martin Exel, Austral Fisheries & SeaBOS Natalie Stoeckl, UTAS-TSBE Nicole Webster, IMAS Rich Little, CSIRO

THEME LEADERS

Coastal & Marine Governance:
Maree Fudge & Liam Fullbrook
Sustainable Futures & Planetary Health:
Richard Cottrell & Ingrid van Putten
Environmental Change & Adaptation:
Rowan Trebilco & Valeriya Komyakova
Knowledge Production:
Rachel Kelly & Rebecca Shellock
Science Engagement & Impact:
Connie Cirkony & Beth Strain

CMS EARLY-CAREER RESEARCHER (ECR) REPRESENTATIVES

Emma Church, IMAS Scott Spillias, CSIRO

CMS STUDENT REPRESENTATIVES

Angus Henderson, IMAS Brigette Wright, IMAS

CMS SHOWCASE PRESENTERS AND PANEL CHAIRS

Akira Weller-Wong, Derwent Estuary Program Alistair Hobday, CSIRO Angela Williamson, Blue Economy CRC Anna Copley, DCCEEW Aysha Fleming, CSIRO Beth Fulton, CSIRO Brianna Le Busque, University of South Australia Cara Stitzlein, CSIRO Catriona Macleod, IMAS Corrine Condie, CSIRO Dean Greeno, Riawunna Eloise Carr, The Australia Institute Graham Wood, University of Tasmania Gretta Pecl, IMAS lan Dutton, AFMA

Jan McDonald, University of Tasmania Jess Melbourne-Thomas, CSIRO Jo Vince, University of Tasmania Julian Harrington, Seafood Industry Council Karen Evans, CSIRO Larissa Taylor, Flinders University Laura Fatovich, Department of Natural Resources and Environment Tasmania Liam Fullbrook, University of Tasmania Malcolm Johnson, Huon Valey Council Megan Saunders, CSIRO Nicole Webster, IMAS Rachel Kelly, IMAS Rowan Trebilco, CSIRO Environment Scott Ling, IMAS Stewart Frusher, University of Tasmania Tim Moltmann, IMAS

CMS SHOWCASE 2024 PARTICIPANTS

CMS Members

Alistair Hobday, CSIRO
Alyssa Marshell, University of Tasmania
Aysha Fleming, CSIRO
Beth Fulton, CSIRO
Brianna Le Busque, University of South
Australia
Cara Stitzlein, CSIRO
Catriona Macleod, IMAS
Cecilia Villanueva, IMAS
Chloe Lucas, University of Tasmania
Connie Cirkony, UTAS
Corrine Condie, CSIRO
David Smith, IMAS
Dean Greeno, Riawunna
Emille Boulot, University of Tasmania

Emily Ogier, IMAS Emma Church, Gabi Mocatta, University of Tasmania Genevieve Phillips, IMAS Georgina Gurney, James Cook University Graham Wood, University of Tasmania Gretta Pecl, IMAS Hannah Fogarty, IMAS lan Dutton, AFMA Jan McDonald, University of Tasmania Jess Melbourne-Thomas, CSIRO Joanna Vince, University of Tasmania Julia Blanchard, IMAS Karen Evans, CSIRO Katherine Ollerhead, Department of Natural Resources and Environment Tasmania

Kathryn Willis, CSIRO
Kirsty Nash, CMS
Liam Fullbrook, University of Tasmania
Malcolm Johnson, Huon Valey Council
Mary Mackay, CSIRO
Megan Saunders, CSIRO
Mibu Fischer, University of Tasmania
Phillipa McCormack, University of
Adelaide
Rachel Kelly, IMAS
Rowan Trebilco, CSIRO Environment
Scott Bennett, IMAS and GSR Foundation
Scott Spillias, CSIRO
Stewart Frusher, University of Tasmania
Valeriya Komyakova, IMAS



CMS SHOWCASE 2024 PARTICIPANTS (CONT.)

CMS Students

Amara Steven, University of Tasmania Andrew Sullivan, University of Tasmania Angus Henderson, IMAS Brigette Wright, IMAS Clement Astruc Delor, IMAS - Institut Jean Nicod

Dimuthu Jayakody, University of Tasmania Edith Shum, University of Tasmania Gage Clawson, University of Tasmania Kathryn Deyell, University of Tasmania Kianna Gallagher, University of Tasmania Lillian Stewart, IMAS

Lily Vanderkelen, CMS Rachel Berry, IMAS Renee Melkert, University of Tasmania / CSIRO Tormey Reimer, IMAS Vaibhavi Dwivedi, University of Tasmania

External Stakeholders, Collaborators, and Traditional Owners

Abbie Calvert, University of Tasmania Akira Weller-Wong, Derwent Estuary Program Alex Maeers, Statewide Mooring Services Amber Senysyn, IMAS Andrew Warmbrunn, Department of Natural Resources and Environment Angela Williamson, Blue Economy CRC Anna Copley, DCCEEW Annabelle Erskine, Marine Solutions Ben Hendriks, NRE Marine Resources Bowen Zhang, IMAS Bree Woods, Marine Solutions Britta Denise Hardesty, CSIRO Cameron Deyell, University of Melbourne Camilla Crockart, Department of Natural Resources and Environment Tasmania Carryn Manicom, Marine Solutions Chris Brown, IMAS Claire Bulter, IMAS Claire Konkes, University of Tasmania Damien Blackwell, Department of Natural Resources and Environment Tasmania David Maynard, FRDC Deb Delaney, IMAS Dekota Mark, University of Tasmania Ed Benyon, University of Tasmania Eloise Carr, The Australia Institute Tasmania Emily Flies, University of Tasmania Eric Brain, Department of Natural Resources and Environment Tasmania

Erica Johnson, Marine Solutions

Evie Sage, IMAS Evie Simpson, The Australia Institute Tasmania Fatme Tala-Montenegro, IMAS Frances Verrier, Parks Australia - Marine Parks Branch Grace Bell, Department of Natural Resources and Environment Tasmania Harriet Brinkhoff, Cradle Coast NRM Hevi Hardini, Australian Maritime College Imogen Napper, University of Plymouth (UK) Jamie Spanou, IMAS Jennifer Hemer, NRM South Jo Vince, University of Tasmania Joel Williams, IMAS John Gunn, IMOS / MBCRC / NMSC Julia Santana-Garcon, IMAS Julian Harrington, Seafood Industry Council Justine Barrett, CSIRO Karen Grant, Outdoor Counselling Katy Baker, IMAS Kelly Hoarea, UTAS IMAS & BE CRC Kristy De Salas, University of Tasmania Kurt Burgess, Marine Solutions Kylie Chatfield, Department of Natural Resources and Environment Tasmania Larissa Taylor, Flinders University Laura Fatovich, Department of Natural Resources and Environment Tasmania Laura Smith, Marine Solutions Louise Fava, DCCEEW Lucia Espasandin Soneira, Institute of Marine Sciences (ICM-CSIC)

Maddy Dyring, University of Queensland Maria Berzunza, Aurecon Mary Parker, Tasmanian Oyster Co. Mathew Youssef, IMAS Nicole Webster, IMAS Olivia Johnson, University of Tasmania Olly Dove, IMAS Paige Green, NRM South Regina Magierowski, University of Tasmania Rhianna Hamilton, The University of Adelaide Wildlife Crime Hub Richie Cuskelly, Department of Natural Resources and Environment Tasmania Rosa Maria Canedo Apolaya, IMAS Roshni Subramaniam, CSIRO Environment Rosie Bird, Tasmanian Wild Seafood Adventures Rosie Katunar, Department of Natural Resources and Environment Tasmania Ruby Fox, IMAS Sam Urmy, Wavefront Ecology Sam Woolnough, Statewide Mooring Services Scott Ling, IMAS Sonja Hempel, Department of Natural Resources and Environment Tasmania Steve Willing, Growth in Mind Susie Cretan, Department of Natural Resources and Environment Tasmania Tim Moltmann, IMAS Ysanne Harper, Tasmania Police Zahra El-Afkar, University of Tasmania Zak Wheaton, NRM South





Centre for Marine Socioecology (CMS)
Institute for Marine and Antarctic Studies

20 Castray Esplanade Battery Point, Hobart Tasmania, Australia 7004

+61 3 6226 6379

MARINESOCIOECOLOGY.ORG







